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| EXAMINER |
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COLIN, CARL G

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| ART UNIT | PAPER NUMBER |
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2136

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,825

Applicant(s)

STAUB ET AL.

Examiner

Carl Colin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION:

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

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DETAILED ACTION

Response to Arguments

1. In response to communications filed on 1/27/2005, applicant amends claims 19, 27, 28, 33, and 36. Claim 20 has been cancelled. The following claims 19-36 are presented for examination.

2. In response to communications filed on 1/27/2005, the amendments to overcome the claim objections have been considered, and the objection to claims 1, 27, 28, 33 and 36 has been withdrawn. The drawing in the reply on 1/27/2005 has been considered, however, some of the drawings are still objected to informalities. The amendment to the specification filed on 1/27/2005 at the bottom of page 2 points out the wrong paragraph.

2.1 Applicant's arguments, pages 9-15, filed on 1/27/2005, with respect to the rejection of claims 19-36 have been fully considered but they are moot in view of a new ground of rejection. Applicant has amended claims 19 and 27, which now recite that the identification is optically read out of optical-diffraction structures of the optical-diffraction structures of the optical marking, changing the scope of the invention. Upon further consideration, a new ground of rejection is made in view of Hallberg and Tompkin under 35 USC 103.

Specification

3. The disclosure is objected to because of the following informalities: there is inconsistency between validation unit on page 9, line 17 and validation device on line 23 for the

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same element. Applicant's cooperation is requested to correct such errors throughout the application. Appropriate correction is required.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "29" and "22" in figure 7 have both been used to point to the same element in the drawing and reference characters "29" and "21" in figure 6 have both been used to point to the same element in the drawing or the lines are not readable. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v.*

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HydReclaim Corp., 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “validation device” in claims 27-36 is used by the claim to mean “writing a number to a document”, while the accepted meaning is “to validate something.” The term is indefinite because the specification does not clearly redefine the term.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6.1 **Claims 19-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4,629,872 to **Hallberg** in view of US Patent 5,882,463 to **Tompkin et al.**

6.2 **As per claims 19, 21, 26, Hallberg** substantially discloses a method of using an activatable document with an at least machine-readable document number, an optical marking with a machine-readable identification and a storage field disposed on a substrate for receiving an at least machine-readable check number. **Hallberg** discloses a check number (PCN)

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produced as a result of cryptographic operation; **Hallberg** discloses a card number or account number (PAN) in machine readable code or magnetic strip that meets the recitation of identification, and a first secret key producing the check number by cryptographic operation with at least two parameters (secret key number and a PIN) when issuing the card (column 2, lines 16-45) and the check number is written to a storage field disposed on a substrate. The disclosure of **Hallberg** meets the recitation of to complete the document to provide an authenticity certificate the check number is produced as the result of a cryptographic operation with at least two parameters, the document number and the identification, wherein the identification is optically read out of optical-diffraction structures of the optical marking and a first secret key, only when the document is put into circulation, and is written into the storage field, and that after the document is put into circulation. **Hallberg** discloses a verification process after the document is issued by means of a the check number read out of the storage field and at least the parameters read by means of a second key different from the first that meets the recitation of wherein the authenticity of the authenticity certificate is checked by means of the check number read out of the storage field and at least the parameters read on the authenticity certificate of the cryptographic operation by means of a second key different from the first key (column 3, line 39 through column 4, line 10 and column 2, lines 35-51). **Hallberg** discloses the identification read out of a machine readable code or magnetic strip but **Hallberg** does not explicitly disclose the identification is optically read out of optical-diffraction structures of the optical marking. **Tompkin et al** in an analogous art discloses a method of applying a security element to a substrate or a document, the security element comprises optical diffraction structures (column 1, line 65 through column 2, line 18), the security element provides a security feature which is

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safeguarding the document from forgery, unauthorized copying, or from unauthorized alterations because of its optical effects which are produced by the diffraction structures (column 1, lines 5-28 and column 9, lines 5-45). The document comprises several storage fields for readable individual codes including codes relating to a person such as signatures, names, pictures, document number, etc. (figure 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the magnetic strip or machine readable code of **Hallberg** to provide optical diffraction structures (column 1, line 65 through column 2, line 18), the security element provides a security feature which is safeguarding the document from forgery, unauthorized copying, or from unauthorized alterations because of its optical effects which are produced by the diffraction structures (column 1, lines 5-28 and column 9, lines 5-45) as taught by **Tompkin et al.** This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Tompkin et al** to provide more security to the numbers on the card by safeguarding the cards from forgery, unauthorized copying, or from unauthorized alterations because of its optical effects which are produced by the diffraction structures ((column 1, lines 5-28 and column 9, lines 5-45).

As per claim 27, claim 27 is similar to the rejected claim 19 except for implementing the claimed method into a system. **Hallberg** substantially discloses a system with a validation device and a verifier comprising a computer unit with a keyboard and a reader with recording means for writing and reading means for reading the parameters, and verifying means for verifying the authenticity of the document using cryptographic operation, for instance, (column 2, line 62 through column 3, line 39 provides description and function of the apparatus in figure

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3) used for generating the check number that meets the recitation of the validation device; (column 3, line 40 through column 4, line 25 provides description and function of the apparatus in figure 4) which provides cryptographic operations with a second key and authenticity checking operations by means of the second key that meets the recitation of verifier. **Hallberg** discloses that numerous variations of the example described are possible. **Hallberg** further discloses acceptance of the card when the comparator circuit produces a valid match that meets the recitation of a signal line for the delivery of a permission signal (column 4, lines 7-25). **Hallberg** does not explicitly disclose the identification is optically read out of optical-diffraction structures of the optical marking. **Tompkin et al** discloses this limitation as discussed above in claim 19 and optical reader (column 10, lines 40-65). Therefore, claim 27 is rejected on the same rationale as the rejection of claim 19.

As per claims 22 and 24, the combination of **Hallberg** and **Tompkin et al** discloses the limitation of wherein for activation of the document the check number is written in at least machine-readable characters into the storage field arranged on the substrate and discloses wherein the mathematically readable check number is written in a magnetic strip arranged on the substrate with the storage field (**Hallberg**, column 2, lines 15-23). Therefore, these claims are rejected on the same rationale as the rejection of claim 19.

As per claims 23 and 25, **Tompkin et al** discloses prior art using microchip for storing information and discloses welding layers together in the chip card for protecting the surface (column 1, lines 55-65). **Tompkin et al** also teaching preventing unauthorized alterations

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because of optical effects which are produced by the diffraction structures (column 1, lines 5-28 and column 9, lines 5-45) and diffraction structures impressed with a heated die an printing procedure that makes it highly suitable for production of digits an difficult to forge (column 11, lines 55-67) that meets the recitation of wherein the check number is written into the storage field of a memory of a microchip located in the substrate and that after the activation procedure the storage field is so blocked that the content of the storage field, once written in, can no longer be altered electronically. Therefore, these claims are rejected on the same rationale as the rejection of claim 19.

As per claims 29-32, Hallberg discloses wherein the verifier has an input keyboard for manual input of a personal identification number (PIN) for enablement of the verifier and that the verifier checks the personal identification number of the user (column 3, lines 45-55); and wherein the verifier has an input keyboard and reading unit connected to the computing unit for manual input of the parameters for the cryptographic operation to the computing unit, wherein the parameters include at least the document number and the check number (column 2, line 63 through column 3, line 2 and column 3, lines 45-55); validation device has an input keyboard and reading unit connected to the computing unit for manual input at least of the document number to the computing unit (column 2, line 63 through column 3, line 2).

As per claim 33, Hallberg discloses wherein the validation device ' receives the input of an individual code related to a person, by means of the input keyboard, that the validation device includes a recording means in the validation device for writing the code into the check field, and

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that the code is one of the parameters for producing the check number in the validation device or for the authenticity check in the verifier (column 2, line 63 through column 3, line 2).

As per claim 34, Hallberg discloses wherein the computing unit in the validation device is such that upon encryption of the check number a personal identification number of an authorized person which is inputted by way of an input keyboard is incorporated as a parameter for production of the check number and that the verifier produces the permission signal in the computing unit only when in the authenticity checking procedure the personal identification number is incorporated by way of the input keyboard of the verifier in the computing unit as a parameter of the cryptographic operation (column 3, line 39 through column 4, line 10).

As per claim 35, Hallberg discloses wherein at least one validation device and at least one verifier are connected by way of a network to a central computer for bidirectional data exchange (fig. 3 and 4 and column 4, lines 11-21).

As per claim 36, Hallberg further discloses acceptance of the card when the comparator circuit produces a valid match that meets the recitation of wherein the at least one verifier is connected by way of a signal line to a service apparatus and that the service apparatus enables a service by means of the permission signal sent to the service apparatus by way of the signal line (column 4, lines 11-21).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ce

Carl Colin

Patent Examiner

June 2, 2005

El. Moise

EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER